POTENSI ANTIMIKROBA DAN ANTIOKSIDAN SEDUHAN KERING DAUN SIRSAK (*Annona muricata* L.), SRIKAYA (*Annona squamosa* L.) DAN NONA (*Annona reticulata* L.)

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2023

ABSTRAK

Penelitian mengenai Potensi Antimikroba dan Antioksidan Seduhan Kering Daun Sirsak (*Annona muricata* L.), Srikaya (*Annona squamosa* L.) dan Nona (*Annona reticulata* L.) telah dilakukan di Laboratorium Mikrobiologi, Universitas Andalas pada bulan April - Juni 2023. Penelitian ini bertujuan untuk menentukan aktivitas antimikroba dan antioksidan ekstrak seduhan kering daun sirsak, srikaya dan nona. Metode yang digunakan dalam penelitian ini adalah metode eksperimen pola nested. Hasil penelitian menunjukkan bahwa setiap ekstrak memberikan pengaruh yang berbeda nyata terhadap *S.aureus* dengan zona hambat terbesar pada ekstrak seduhan kering daun nona (10,65 mm), namun tidak memberikan pengaruh berbeda nyata terhadap *E.coli* dan *C.albicans* yang tidak terdapat zona hambat. Daya hambat seduhan kering daun nona 48,58% dari kontrol positif kloramfenikol (0,1 mg/ml) dalam menghambat *S.aureus,* 24,57% terhadap *E.coli* dan 28,70% bila dibandingkan dengan kontrol positif fluconazole (0,1 mg/ml) terhadap *C.albicans.* Kekuatan KHM dari ekstrak seduhan kering daun sirsak dan daun nona terhadap *S.aureus* yakni 6.25% dengan KBM 12.5%. KHM dari ekstrak seduhan kering daun srikaya terhadap *S.aureus* yakni 6.25% dengan KBM 25%. Aktivitas antioksidan tertinggi pada ekstrak seduhan kering daun sirsak dengan nilai IC50 38,56 µg/ml. Kandungan polifenol tertinggi pada ekstrak seduhan kering daun nona sebesar 38,97mgGAE/ml dan karotenoid tertinggi ekstrak segar daun srikaya sebesar 548,84 µmol/g.

Kata Kunci: Antimikroba, Antioksidan, Annona, Daun, Seduhan

ABSTRACT

Research on the Antimicrobial and Antioxidant Potential of Infusions from Dried Leaves Soursop (*Annona muricata* L.), Sugar Apple (*Annona squamosa* L.), and Custard Apple (*Annona reticulata* L.) was conducted at the Microbiology Laboratory, Andalas University in April - June 2023. This study aimed to determine the antimicrobial and antioxidant activities of infusion from dried leaves extracts of soursop, sugar apple, and custard apple. The method used in this research was nested pattern experimental method. The results showed the each extract had significantly different effects on *S.aureus*, with the largest inhibitory zone observed in the infusion from dried custard apple leaves (10.65 mm) and not significantly different from *E.coli* and *C.albicans*, as no inhibitory zone were found. The inhibitory power of the infusion from dried custard apple leaves was 48.58% against *S.aureus*, compared to the positive control chloramphenicol (0,1 mg/ml), 24.57% against *E.coli*, and 28.70% compared to the positive control fluconazole (0,1 mg/ml) against *C.albicans*. The Minimum Inhibitory Concentration (MIC) of soursop and custard apple leaf extracts against *S.aureus* was 6.25% with a Minimum Lethal Concentration (MLC) of 12.5%. The MIC of sugar apple leaf extract against *S.aureus* was 6.25% with an MLC of 25%. The highest antioxidant activity was observed in the soursop leaf extract with an IC50 value of 38.56 µg/ml. The highest polyphenol content was found in the custard apple leaf extract at 38.97 mgGAE/ml, and the highest carotenoid content was in the fresh sugar apple leaf extract at 548.84 µmol/g.

Keywords: Antimicrobial, Antioxidant, Annona , Infusion , Leaves.